

Title (en)

METHOD FOR FILLING A SPACE IN A SEMICONDUCTOR DEVICE

Title (de)

VERFAHREN ZUM FÜLLEN EINES RAUMES IN EINEM HALBLEITER BAUELEMENT

Title (fr)

PROCÉDÉ POUR REMPLIR UN ESPACE DANS UN DISPOSITIF À SEMI-CONDUCTEUR

Publication

**EP 3886143 A1 20210929 (EN)**

Application

**EP 20164988 A 20200323**

Priority

EP 20164988 A 20200323

Abstract (en)

A method for partially filling a space between two superimposed structures in a semiconductor device under construction, comprising the steps of:a. Providing the two superimposed structures having said space therebetween,b. Entirely filling said space with a thermoplastic material,c. Removing a first portion of the thermoplastic material present in the space, the first portion comprising at least part of a top surface of the thermoplastic material, thereby leaving in said space a remaining thermoplastic material having a height, andd. heating up the remaining photosensitive thermoplastic material so as to reduce its height.

IPC 8 full level

**H01L 21/28** (2006.01); **H01L 21/822** (2006.01); **H01L 21/8234** (2006.01); **H01L 21/8238** (2006.01); **H01L 27/06** (2006.01); **H01L 29/06** (2006.01); **H01L 29/66** (2006.01)

CPC (source: CN EP US)

**H01L 21/28088** (2013.01 - EP); **H01L 21/8221** (2013.01 - EP); **H01L 21/8238** (2013.01 - CN); **H01L 21/823821** (2013.01 - CN); **H01L 21/823842** (2013.01 - CN EP); **H01L 27/0688** (2013.01 - EP); **H01L 27/092** (2013.01 - CN); **H01L 27/0922** (2013.01 - EP); **H01L 27/0924** (2013.01 - CN); **H01L 29/0669** (2013.01 - US); **H01L 29/0673** (2013.01 - EP); **H01L 29/42392** (2013.01 - EP); **H01L 29/66439** (2013.01 - EP); **H01L 29/66545** (2013.01 - EP US); **H01L 29/66818** (2013.01 - US); **H01L 29/775** (2013.01 - EP); **H01L 29/7853** (2013.01 - US); **H01L 29/78696** (2013.01 - EP); **B82Y 10/00** (2013.01 - EP); **H01L 29/4966** (2013.01 - EP)

Citation (applicant)

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- RYCKAERT J. ET AL., SYMP. VLSI TECHNOL. DIG. TECH. PAPERS, 2018, pages 141 - 142
- "IUPAC Recommendations", 1997, BLACKWELL SCIENCE, article "Compendium of Chemical Technology"

Citation (search report)

- [A] US 2019172828 A1 20190606 - SMITH JEFFREY [US], et al
- [A] US 2014273373 A1 20140918 - MAKALA RAGHUVeer S [US], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3886143 A1 20210929; CN 113437024 A 20210924; US 11824122 B2 20231121; US 2021296500 A1 20210923**

DOCDB simple family (application)

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